

Title (en)

Thermal plug for turbine bucket shank cavity and related method

Title (de)

Thermische Stecker für einen Hohlraum einer Turbinenschaufel und verwandte Verfahren

Title (fr)

Bouchon thermique pour une cavité d'une aube de turbine et un procédé lié

Publication

EP 2586967 A2 20130501 (EN)

Application

EP 12190058 A 20121025

Priority

US 201113283764 A 20111028

Abstract (en)

A turbine rotor disk includes a row of buckets (10) secured about a radially outer periphery of the rotor disk, each bucket (10) having an airfoil (14), a platform (16), a shank (18) and a mounting portion (20), the mounting portion (20) received in a radial slot formed in the rotor disk such that adjacent buckets (10) in adjacent radial slots are separated by a rotor disk post located between adjacent mounting portions (20) and a shank cavity (46) between adjacent shanks, radially outward of the rotor disk post (12) and radially inward of adjacent platforms (16). The shank cavity (46) is substantially filled with at least one discrete thermal plug (56).

IPC 8 full level

F01D 5/08 (2006.01); **F01D 5/22** (2006.01); **F01D 11/00** (2006.01)

CPC (source: EP US)

F01D 5/08 (2013.01 - EP US); **F01D 5/081** (2013.01 - EP US); **F01D 5/22** (2013.01 - EP US); **F01D 11/008** (2013.01 - EP US); **F05D 2240/81** (2013.01 - EP US); **Y10T 29/49336** (2015.01 - EP US)

Citation (applicant)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

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EP 2586967 A2 20130501; **EP 2586967 A3 20141112**; **EP 2586967 B1 20180103**; CN 103089324 A 20130508; CN 103089324 B 20160831; US 2013108446 A1 20130502; US 9366142 B2 20160614

DOCDB simple family (application)

EP 12190058 A 20121025; CN 201210417116 A 20121026; US 201113283764 A 20111028